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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO. CONFIRMATION NO	
09/694,554	10/23/2000	Richard O. Moore JR.	G-0004 9964	
759	90 01/22/2004	EXAMINER		
BURNS, DOA P.O. BOX 1404	NE, SWECKER & M	GRIFFIN, WALTER DEAN		
	, VA 22313-1404		ART UNIT PAPER NUMBER	
			1764	

DATE MAILED: 01/22/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

•   • ,	1	Application No.	Applicant(s)		
Office Action Sur	mmanı	09/694,554	MOORE, RICHARD O		
Office Action Sur	ıımary	xaminer	Art Unit		
		Valter D. Griffin	1764		
The MAILING DATE of the Period for Reply	is communication appea	rs on the cover sheet with the	correspondence address		
A SHORTENED STATUTORY THE MAILING DATE OF THIS  - Extensions of time may be available unde after SIX (6) MONTHS from the mailing d:  - If the period for reply specified above is le  - If NO period for reply is specified above, t!  - Failure to reply within the set or extended  - Any reply received by the Office later than earned patent term adjustment. See 37 C  Status	COMINIONICATION.  r the provisions of 37 CFR 1.136(a ate of this communication.  ss than thirty (30) days, a reply wit he maximum statutory period will a period for reply will, by statute, cat three months after the mailing dat	). In no event, however, may a reply be tir hin the statutory minimum of thirty (30) day pply and will expire SIX (6) MONTHS from	nely filed as will be considered timely. I the mailing date of this communication.		
1) Responsive to communic	ation(s) filed on 30 Dece	ember 2003			
2a) ☐ This action is FINAL.		ion is non-final.			
3) Since this application is in			oscoution on to the medical-		
closed in accordance with	the practice under Ex p	parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.		
Disposition of Claims					
4)⊠ Claim(s) <u>2-4,7-11,16-18 a</u>	nd 24-30 is/are pending	in the application.			
4a) Of the above claim(s)					
5) Claim(s) is/are allo	wed.				
6)⊠ Claim(s) <u>2-4,7-11,16-18 a</u>	nd 24-30 is/are rejected.				
7) Claim(s) is/are objection	ected to.	•			
8) Claim(s) are subject	ct to restriction and/or ele	ection requirement.			
Application Papers					
9) The specification is objected	ed to by the Examiner				
10)⊠ The drawing(s) filed on <u>23</u>	October 2000 is/are: a)	⊠ accepted or b)⊡ objected	to by the Evenines		
Applicant may not request the	at any objection to the draw	ving(s) be held in abeyance. See	37 CED 1 95(a)		
Replacement drawing sheet(	s) including the correction i	s required if the drawing(s) is obje	ected to See 37 CEP 1 121(d)		
11) The oath or declaration is o	bjected to by the Exami	ner. Note the attached Office	Action or form PTO-152		
Priority under 35 U.S.C. §§ 119 an	d <b>120</b>		10.1011 01 1011111 1 10-102.		
12) . Acknowledgment is made	of a claim for foreign prid	ority under 35 U.S.C. § 119(a)	-(d) or (f).		
a) ☐ All b) ☐ Some * c) ☐ 1.☐ Certified copies of the		yo boon wood and			
2. Certified copies of the	ie priority documents ha	ve been received in Application	un No		
2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage					
application from the	international Bureau (Po	CT Rule 17.2(a)).			
* See the attached detailed O	ilice action for a list of th	e certified copies not received	l.		
Since a specific reference Ma	s included in the first se	ntence of the specification or i	n an Application Data Sheet		
3/ OFK 1.70,					
14) Acknowledgment is made of	oreign language provisio	onal application has been rece	ived.		
14) Acknowledgment is made of reference was included in the	e first sentence of the sp	ecification or in an Application	ind/or 121 since a specific Data Sheet. 37 CFR 1.78.		
Attachment(s)		·			
1) Notice of References Cited (PTO-892)		4) Theories Comment	PTO-413) Paper No(s)		
2) Notice of Draftsperson's Patent Drawing	Review (PTO-948)	5) Notice of Informal Pat	tent Application (PTO-152)		
3) Information Disclosure Statement(s) (PT	O-1449) Paper No(s)	6) Other:	( ) · · · · · · · · · · · · · · · · · ·		
U.S. Patent and Trademark Office PTOL-326 (Rev. 11-03)	Office Action S	Summary	Part of Paner No. 011204		

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#### **DETAILED ACTION**

## Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on December 30, 2003 has been entered.

#### Response to Amendment

The rejections under 35 USC 102(b) and 103 as described in the Office Action mailed on August 1, 2003 have been withdrawn in view of the amendment filed on October 31, 2003.

New rejections follow.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 24, 2, and 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Derr et al. (US 4,080,397).

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The Derr reference discloses a process for hydroconverting a Fischer-Tropsch product that contains oxygenates and olefinic hydrocarbons. These oxygenates and olefinic hydrocarbons would necessarily include the specific compounds of claim 2. The process comprises preheating the feed and then admixing hydrogen with the feed to form the feed to the hydroconversion zone. Heating temperatures are within the range of claim 29. The feed is then hydroconverted. The reference discloses that some hydrogen may be added to the feed upstream of the furnace to help reduce or minimize fouling of the furnace tubes or coils. This hydrogen addition is necessarily not under hydroconversion conditions. See column 1, lines 10-13; column 2, lines 5-10, 24-40, and 64-68; column 3, lines 1-11 and 65-68; column 4, lines 1-6; and column 11, lines 5-50.

#### Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

- 1. Determining the scope and contents of the prior art.
- 2. Ascertaining the differences between the prior art and the claims at issue.
- 3. Resolving the level of ordinary skill in the pertinent art.
- 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

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Claims 3, 4, 7-11, 16-18, 25-28, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Derr et al. (US 4,080,397).

The Derr reference discloses a process for hydroconverting a Fischer-Tropsch product that contains oxygenates and olefinic hydrocarbons. These oxygenates and olefinic hydrocarbons would necessarily include the specific compounds of claim 2. The process comprises preheating the feed and then admixing hydrogen with the feed to form the feed to the hydroconversion zone. Heating temperatures are within the range of claim 29. The feed is then hydroconverted. The reference discloses that some hydrogen may be added to the feed upstream of the furnace to help reduce or minimize fouling of the furnace tubes or coils. This hydrogen addition is necessarily not under hydroconversion conditions. See column 1, lines 10-13; column 2, lines 5-10, 24-40, and 64-68; column 3, lines 1-11 and 65-68; column 4, lines 1-6; and column 11, lines 5-50.

The Derr reference does not disclose the hydrogen amounts of claims 25-28, does not disclose the temperatures of claim 30, does not disclose the amounts of olefins or oxygenates as in claims 3, 4, and 7-10, does not disclose the boiling range of the hydrocarbon as in claim 11, and does not disclose the hydrogen sources.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Derr process by using the claimed hydrogen amounts because one would use only the amount necessary to provide the disclosed effect of minimization of fouling.

It also would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the Derr process by using feeds having the claimed amounts of olefins or oxygenates and boiling within the claimed range because these feeds are

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chemically and physically similar to the feeds disclosed by Derr and therefore would be expected to be effectively treated in the process of Derr.

It also would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Derr by utilizing the claimed hydrogen sources because the process will function effectively regardless of the source of the hydrogen as long as sufficient hydrogen is provided.

It also would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process of Derr by utilizing the claimed process temperatures because one would adjust temperatures to values including those claimed as long as effective hydroconversion results.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Walter D. Griffin whose telephone number is (571) 272-1447. The examiner can normally be reached on Monday-Friday 6:30 to 4:00 with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0651.

Walter D. Griffin Primary Examiner Art Unit 1764

WG January 12, 2004